31. A professor teaches a class of 13 students. There is one visually challenged student, Louise, who must sit in the front row next to a tutor, who is also a member of the class. Assume that the front row has seven chairs, and the tutor must be seated next to Louise. Identify the problem solving method that should be used and complete parts (a) through (d).

Identify the problem solving method that should be used. Choose the correct answer below.

- ○ A. Counterexample Principle
- ○ B. Be Systematic Strategy
- ○ C. Three-Way Principle
- ○ D. Look For Patterns Strategy

a. How many ways can Louise and the tutor choose their block of seats?

☐

b. How many ways can Louise and the tutor sit in those two seats?

☐

c. How many ways can the remaining five seats be filled?

☐

d. How many total ways can the students choose to sit in the first row?

The number of ways to sit in the first row under these conditions is ☐.

32. In an experiment on social interaction, 7 people will sit in 7 seats in a row. In how many ways can this be done?

There are ☐ ways.